

How to Get Started:

Practical Hands On Advice



SEMI F47 Services Companies

- **Two U.S. companies currently specialize in SEMI F47 related services for clients worldwide.**
- **These two companies are:**
 - **EPRI**
 - **Power Standards Lab**



Company Locations

**Power Standards
Laboratory**
1201 Village Parkway
#101, Alameda,
California 94501, U.S.A.
++1-510-522-4400
www.powerstandards.com



**EPRI
Home Office**
Palo Alto
California
www.epri.com



**EPRI
Semiconductor and
Industrial PQ Group**
942 Corridor Park Boulevard
Knoxville, Tennessee
37931, U.S.A.
++ 1-865-218-8022
www.f47testing.com



Types of SEMI F47 Services

- **PQ Training for Semiconductor Tool suppliers and manufacturers**
- **SEMI F47 Compliance Testing in Lab, Tool Supplier's Site or at Manufacturer Site**
- **SEMI F47 Test Hardware**
 - EPRI Porto-Sag
 - PSL Power Corrupter
- **SEMI F47 Tool and Facility Design Consulting**
- **Semiconductor Plant Power Quality Audits**



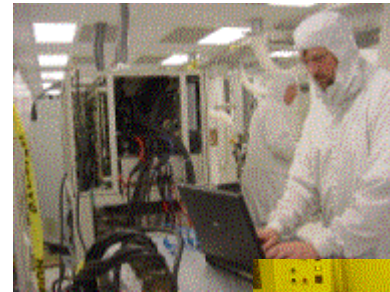
Test Locations



Lab Bench



On-site



Clean room



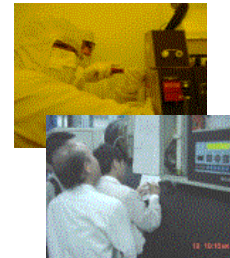
North America



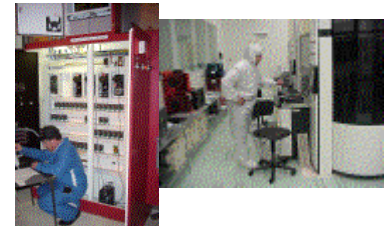
Japan



Taiwan



Singapore



Europe



SEMI F47 Test equipment

- Costs include sag generator, data acquisition system, cables, software, and laptop (if required)
- 480V, 100A continuous, IGBT switch
- 480V, 200A continuous, IGBT switch
- *For more information about sag generator products and features visit www.powerstandards.com and www.f47testing.com*



PSL's 200A
Power Corrupter Series



EPRI's
200A
Porto-Sag Series



Typical SEMI F47 Certification

*Compare to the cost
of a single in-the-field
failure*

- Costs include equipment, travel, lab or on-site testing, F47 Certificate
- Small Component Lab Test (relays, contactors, etc)
- Simple components – RF Generators, power supplies, small VFDs
- Simple systems
- Complex systems



Conclusions

- **Experienced Test Companies and Test hardware are available to conduct SEMI F47 and IEC 61000-4-11/34 work.**
- **Decide which approach is right for you:**
 - Hire company for help
 - Tool Testing
 - PQ Audit
 - Purchase your own testing equipment
 - Both
- **The presenters are available now & immediately following the program for clarifications on SEMI F47 and to give further advice**

